

**Second Five-Year Review Report**

**for**

**Allied Plating, Inc  
Superfund Site  
Portland, Oregon**

September, 2003

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Portland, Oregon  
Second Five-Year Review Report**

**I. Introduction**

**A. Purpose of the Five-Year Review**

Region 10 of the Environmental Protection Agency (EPA) has conducted a Second Five-Year Review of the Allied Plating, Inc (Allied Plating or Site), and prepared this report consistent with the requirements of Section 121(c) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as amended in Section 300.430(f)(4)(ii) of the National Contingency Plan (NCP).

The NCP states:

If a remedial action is selected that results in hazardous substances, pollutants or contaminants remaining at the site above levels that allow for unlimited use and unrestricted exposure, the lead agency shall review such action no less often than every five years after the initiation of the selected remedial actions.

Some of the remedial actions at the Site have resulted in contaminants remaining on the site above levels allowing unlimited use. Thus, a review is required. The purpose of this five-year review is to determine whether the remedy at the site is protective of human health and the environment. Methods, findings, and conclusions of this review are documented in this report.

This Second five-year review was conducted pursuant to the Office of Solid Waste and Emergency Response Directives 9355.7-03B-P. The review took place between December 2002 and June 2003. It was conducted by the EPA site manager for the site. The current EPA site manager has been managing the site since 1990.

The Allied Plating Superfund Site was remediated by a Removal Action (Removal) in 1992. A risk assessment conducted after the Removal was completed concluded that the site did not pose an unacceptable risk under an industrial scenario. A no further action Record of Decision was signed in 1993. The site was deleted from the National Priorities List on November 11, 1994. Five years have elapsed since the last five-Year Review thus triggering this five-year Review.

**II. Site Location and Description**

**Location and Description**

The Allied Plating site is located at 8135 Martin Luther King, Jr. (MLK) Boulevard in an industrial and commercial district of northeastern Portland, Multnomah County, Oregon. See Figure 1. It is approximately 1,000 feet north of the intersection of MLK Boulevard and N.E. Columbia Boulevard, and 1,000 feet south of the Columbia Slough (Slough), a local drainage channel that merges with the Willamette River and then the Columbia River.

The site covers approximately 12 acres. The site investigation and cleanup was divided into three areas based on their historical usage. See Figure 2. The southernmost section contained the administrative and storage building for the former Allied Plating business. This area was across the street from the location where plating activities occurred, and was not considered to be contaminated from operations. The "layout area" contained the building housing the former plating operation and a storage yard. This area is presently occupied by the Associated Crane Company, a heavy equipment repair facility. The "impoundment area" was the northern, low lying area of the property. Prior to the Removal, it contained a pond formed from the discharge of wastewater from the plating business.

The impoundment area was remediated during a 1992 Removal. All contaminated soil, vegetation, and debris were removed. The impoundment area was then graded and covered with rock.

#### A. Topography

Prior to 1969, the property drained overland to the north, into a swale that led directly into the Slough. Wastewater from the plating facility was discharged to this natural drainage. In 1969, extensive backfilling with dirt and construction debris north of the site partially covered the swale, cut off the natural drainage, and left the northern end of the site 20 to 30 feet lower than the surrounding off-site areas. Wastewater discharged from the facility began to collect in this low lying area (the impoundment area) forming a 1.5 acre pond. Surface runoff from the Allied Plating site and surface water draining from the adjacent area contributed to the pond. The pond was drained and filled during the Removal.

A combined sewer overflow (CSO) pipeline runs northerly under the impoundment area to an outfall in the Slough. The CSO line is a 36-inch square pipe constructed in 1928. During the 1992 Removal, a remote control video camera was used to inspect the pipeline. The pipeline was still in good condition, and not acting as a conduit for drainage from the pond.

#### B. Adjacent Land Uses

The site is located in an area of light industry.

#### C. Groundwater

A single unconfined aquifer, the Troutdale Aquifer, was identified beneath the site. The water level in the Troutdale was measured to be 10 feet above mean sea level, and was found approximately 10 feet below the surface of the impoundment area. The predominant groundwater flow direction was northwest. A localized shallow aquifer was found in the vicinity of the impoundment area. The water table in the shallow aquifer was 15 feet above mean sea level.

#### D. Site Activities Leading to Contamination

In 1957, the site was leased by Mr. Ernest Stierly as the site for the Allied Plating, Inc., chrome plating facility which operated from that year until 1984 when the company declared bankruptcy and ceased operations.

Prior to 1969, wastewater from the facility was discharged to the swale leading to the Slough. After 1969, when backfilling isolated the property, liquid wastes from the plating process were discharged to the pond on the site. The metals in the plating wastewater precipitated out, forming a layer of plating waste at the bottom of the pond. Aerial photographs indicate that the pond covered the north end of the property while the company was discharging. When the company ceased discharging, the pond size diminished, leaving a dry area covered with plating waste, and a small pond with contaminated sediments.

### **III. Removal Action**

In the fall of 1992, following a Remedial Investigation which determined that site contamination was limited to the impoundment area, the site was remediated by a Removal Action (Removal) (see Figure 3 for the area covered by the Removal). The selected goal of the Removal was to clean the site so that the Hazard Index would be less than or equal to 1, and the excess cancer risk would be less than or equal to  $1 \times 10^{-4}$  for the industrial scenario. EPA determined that the use of the industrial scenario was appropriate based on the fact that the site and vicinity historically were, and currently are used for industrial purposes, and would likely stay that way in the future. In addition, future use of the property for building residences would require filling the impoundment area to the grade of the layout area or the grade of MLK Boulevard (between 5 and 30 feet of fill). Thus, there would not be contact with any residual contamination.

During the Removal, the pond was drained, and approximately 900 tons of contaminated sediments and site soil were excavated and disposed in a hazardous waste landfill. The impoundment area (including the former pond) was then backfilled with one foot of 6" to 9" diameter rock. The rock was leveled and graded with a bulldozer so that no low areas were visible. Approximately 5600 tons of rock were

placed as backfill. Following the Removal, the site monitoring wells were abandoned in accordance with Oregon Department of Environmental Quality regulations.

During pre-listing investigations both the shallow and deep aquifers were found to be contaminated with nickel, chromium and lead. However, during the Remedial Investigation, only one site well, which was located in the shallow aquifer, was found to exceed drinking water standards. The well exceeded the standard for nickel. [The MCL and MCLG for Nickel were remanded on February 9, 1995. This means that while many water suppliers continue to monitor nickel levels in their water, there is currently no EPA legal limit on the amount of nickel in drinking water]. Although shallow aquifer use was unlikely, EPA had the site owner place a deed restriction on the property to prevent the use of the shallow aquifer for drinking water purposes, and require testing of the Troutdale Aquifer beneath the site prior to use for drinking. A copy of the restriction placed on the deed is in the Administrative Record for the site. The deed restriction contains the following language:

*The undersigned as owners of said tracts agree to burden the above described real property with a restriction prohibiting the use of a well for drinking water unless the top of the screened interval is deeper than 20' below mean sea level, and the water from the well is tested to ensure that it meets drinking water standards before use.*

(The required interval in the deed restriction will prevent screening of future wells in the shallow aquifer.)

#### **IV. Remedy Implementation Status**

No site activities have been conducted since the last review. The site had been deleted prior to the last review.

#### **V. Progress Since Last Review**

The following statements are from the 1998 review for the site:

*No additional activities are required for this site. The site was re-mediated in 1992. In the five years since the site was re-mediated, the area was filled with 5 to 10 feet of clean fill preventing any incidental contact with the residual site contamination.*

No CERCLA actions have taken place on the site since the last review.

## **VI. Second Five-Year Review Process**

### **A. Activities**

The Second five-year review process was conducted between December 2002 and June 2003. The review consisted of a site inspection on May 28, 2003, and review of the Record of Decision and previous five year review. There has been no community interest for this site. Therefore, there were no community interviews conducted. A newspaper notice will be placed in the Oregonian to announce the completion and availability of this review.

### **B. Site Visit**

EPA inspected the site on May 28, 2003. The site and surrounding properties are still used for industrial purposes. The former impoundment area is now used to store cranes and heavy equipment parts.

The Removal remediated the site to industrial standards. The current filling activities have buried the former site surface under at 5 to 10 feet of fill. Thus, there is no longer any direct exposure to the residual contamination.

## **VII. Technical Assessment**

### **A. Question A: Is the remedy functioning as intended by the decision documents?**

The site was remediated successfully during the Removal. Following the Removal (and prior to the Record of Decision), the deed restriction limiting groundwater use was placed on the property. The EPA remedy called for no further action. This remedy decision is still valid.

Conclusion: The remedy is functioning as intended by the decision documents.

### **B. Question B: Are the exposure assumptions, toxicity data, cleanup levels, and remedial objectives (RAOs) used at the time of remedy selection still valid?**

Changes to Site conditions, exposure assumptions and RAOs:

There have been no changes in the physical conditions at the site that would affect the protectiveness of the remedy. There are no changes in the exposure assumptions, and remedial objectives used in making the remedy decisions.

Changes in toxicity data, cleanup levels and other contaminant characteristics:

The MCL and MCLG for nickel were remanded on February 9, 1995. This means that while many water suppliers continue to monitor nickel levels in their water, there is currently no EPA legal limit on the amount of nickel in drinking water. EPA had institutional controls placed on the site to prevent drinking contaminated water in the shallow aquifer, and to ensure that drinking the Troutdale Aquifer was safe. During site discovery, elevated levels of lead, chromium and nickel were found in both the shallow and Troutdale aquifers. However, at the time of the remedial investigation, the only contaminant found above the MCL was nickel, which was found in the shallow aquifer. Because water in this shallow aquifer exceeded the nickel MCL, EPA placed a restriction on the property prohibiting its use. The recharge to the shallow aquifer at the site is mainly street runoff from the adjacent Martin Luther King, Jr. Avenue. It is therefore highly unlikely that anyone would ever drink water from the aquifer, and also not prudent to do so.

Because the Troutdale Aquifer had been contaminated, EPA required the restriction on the deed calling for water sampling in the deep aquifer before use. EPA believes that the requirement for testing of the aquifer before use is necessary to ensure the protection of public health, therefore the restriction on the property is still required.

C. Question C: Has any information come to light that could question the protectiveness of this remedy?

There are no new ecological risks that have come to light since remedy implementation, no natural disasters have impacted the remedy, and there is no additional information which raises questions about the remedy. Based on current information, no information calls into question the protectiveness of the remedy.

D. Technical Assessment Summary

According to the data reviewed and the site inspection, the remedy is functioning as intended by the ROD. There have been no changes to the physical conditions of the site that would affect the protectiveness of the remedy. There is no other information that calls into question the protectiveness of the remedy.

## **VIII. Issues**

<b>List of Issues</b>		
Issue	Currently Affects Protectiveness (Y/N)	Affects Future Protectiveness (Y/N)
<p>There is no longer an MCL for nickel. Is the restriction of groundwater use still valid, or should the restriction be removed?</p> <p>EPA believes that the requirement restricting groundwater use is still valid because the Troutdale Aquifer beneath the site had been contaminated.</p>	N	N

#### **IX. Recommendations and Follow-up Actions**

None.

#### **X. Protectiveness Statements**

##### Site Statement of Protectiveness

The remedy is protective of human health and the environment.

#### **XI. Recommendations**

No additional activities are required for this site. The site was remediated in 1992. In the ten years since the site was remediated, the area was filled with 5 to 10 feet of clean fill preventing any incidental contact with the residual site contamination.

#### **XII. Next Review**

The next five-year review will be conducted in the year 2008.

                    //s//                      
Michael F. Gearherad, Director  
Environmental Cleanup Office

                    September 8, 2003                      
Date